

**Autumnwood ESH Consultants**

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15 November 2018

Mr. John Nordine
U.S. EPA Region 5
RCRA Enforcement and Compliance Assurance Branch (LU-16)
77 West Jackson Boulevard
Chicago, Illinois 60604

Re: Central Wire, Union, Illinois RCRA CMI Monthly Progress Report, October 2018
EPA ID: ILD005178975

Dear Mr. Nordine:

Enclosed please find the RCRA CMI Monthly Progress Report for the Central Wire, Inc. (CWI) facility located in Union, Illinois for October 2018.

This report includes the eDMR for the groundwater pump & treat facility, the NPDES laboratory analytical report, which includes the effluent data used in the eDMR and the

Ex. 6 Personal Privacy (PP)

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analytical data for Volatile

Organic Compounds. All the analytical data is included in the *10-2018 NPDES Analytical Report* file.

If you have any comments or questions regarding the progress of this project, please contact me at (262) 237-1130.

Sincerely,

Autumnwood ESH Consultants, LLC

John W. Thorsen, P.E.

JWT: jt

Encl

cc:	Joyce Munie	IEPA
	Robert Kay	USGS
	Gerald W. Ruopp	Central Wire
	Robert Johnson	Central Wire

MONTHLY PROGRESS REPORT
Central Wire Union, Illinois Site
October 2018

1 Progress Made This Reporting Period

Groundwater Pump & Treat System

In this reporting period Central Wire Inc. (CWI) continued the operation and maintenance of the groundwater extraction and treatment (P&T) system. During this period CWI rehabilitated the two extraction wells. Extraction well no. 1 was rehabilitated first and is now pumping at a rate of about 425 gallons per minute (GPM) which is 612,000 gallons per day (GPD). In the rehabilitation of extraction well no. 2, CWI found out that the casing was degraded in an area two feet above the screen and needed to be repaired. The repair will entail a custom made screen fitting inside the eight inch casing from the bottom of the well to 1 -1/2 feet below the top of the casing to keep the gravel pack contained outside of the well. That screen should be installed in November 2018.

With the well rehabilitation of Extraction Well No. 1 in October, CWI treated an average of 628,000 GPD with a maximum daily flow of 655,000 GPD. Table 1, attached, lists the average daily P&T volumes by month from January 2015 through October 2018. The influent flow to the pump and treat system had been reduced by about 30,000 gallons per day per month since November 2017 but has increased significantly with the completion of the rehabilitation of Extraction Well No. 1.

The laboratory analytical report for the pump and treat effluent sample is attached. Samples were collected on October 16, 2018 and arrived at the Test America Laboratory on October 17, 2018 at 0.5° C.

The monthly NPDES sample met effluent limitations for pH, 1,1, t-Trichloroethane (TCA), Trichloroethene (TCE) and Tetrachloroethene (PCE). The electronic Discharge Monitoring Report (eDMR) for the month is attached to this report.

Ex. 6 Personal Privacy (PP) Samples and Well Usage

The Ex. 6 Personal Privacy (PP) well samples Ex. 6 Personal Privacy (PP) were collected at the same time as the pump and treat effluent samples and sent to the analytical laboratory in the same batch. There were no volatile organic compound detections found in the Ex. 6 Personal Privacy (PP) samples. The analytical data is in the same analytical report as the pump and treat samples (*10-2018 NPDES Analytical Report*).

Ex. 6 Personal Privacy (PP) sample locations are provided in Figure 1.

The total flow on the Ex. 6 Personal Privacy (PP) flowmeter on November 5 was 66,337,855. On October 10 the flowmeter showed the total flow at 66,130,453 gallons. Therefore, Ex. 6 Personal Privacy (PP) used 207,402 gallons over 26 days or approximately 7,800 GPD, significantly less than the average of approximately 65,000 GPD in September.

Ex. 6 Personal Privacy (PP) Irrigation and CWI Pump & Discharge Wells at South Branch Nursery

McHenry County has issued the replacement irrigation well permit and the pump and discharge permit. IEPA has not reissued the CWI NPDES pump and treat permit which includes outfall no. 2 for the discharge from the pump and discharge well to be located at the South Branch Nursery. This permit was reapplied for in October 2017 and it expired on May 31, 2018. IEPA have issued two draft permits, but no final permit has been issued at this date.

The **Ex. 6 Personal Privacy (PP)** will be shutting down their irrigation well in early November 2018 for the 2018 – 2019 Winter season.

Ex. 6 Personal Privacy (PP) Well Pumpage

Historically there has been some concern that the **Ex. 6 Personal Privacy (PP)** irrigation wells, located downgradient from the chlorinated plume, have impacted the movement of the plume. As a result, CWI has been monitoring groundwater level fluctuations at the most downgradient monitoring well, DGW-2, since 2010.

Over the month Central Wire personnel read the hour meter on the **Ex. 6 Personal Privacy (PP)** well pump engines for the **Ex. 6 Personal Privacy (PP)** irrigation wells on a weekly basis. Table 3 provides the data collected from the hour meters on the pump engines. This data is used in Table 4, attached, which plots the groundwater elevations against the daily precipitation and weekly irrigation well pumpage at **Ex. 6 Personal Privacy (PP)**. The precipitation data is from the National Weather Service's Marengo station.

Table 3
Summary of 2018 Irrigation Pumping Hours per Week at Ex. 6 Personal Privacy (PP)
October 1 through November 1, 2018

Date of Hour Meter Reading	Ex. 6 Personal Privacy (PP)				Hours of Irrigation Well Pumping/Week
	Hour Meter Reading	Hours Pumped	Hour Meter Reading	Hours Pumped	
10/1/2018	7331	0	5118	0	0
10/8/2018	7331	0	5120	2	2
10/15/2018	7331	0	5120	0	0
10/22/2018	7331	0	5126	6	6
10/29/2018	7331	0	5148	22	22
11/1/2018	7331	0	5148	0	0
Totals		0		30	30

Regarding comparing the manual groundwater measurements to the data logger, the last September data logger reading of the water level in DGW-2I on 10/1/2018 at 1329 hours was 24.68 feet or 5.66 feet below the top of casing. The manual measurement on that day at about 1530 hours was 566 feet below the top of casing. On 11/1/2018 the manual measurement of the depth of the water below the top of casing in DGW-2I was 5.03 feet below the top of casing at about 1530 hours. The last data logger reading of the amount of water above the data logger at 1528 hours was 25.31 feet or 5.03 feet below the top of casing (30.34 feet [data logger below top of casing] – 25.31 feet = 5.03 feet).

Table 4 shows the groundwater levels plotted against daily precipitation and weekly hours of irrigation well pumpage from October 1 to November 1, 2018.

The groundwater elevation during this period reached its highest level on October 7 at 817.921 feet above mean sea level. The groundwater elevation reached its low on October 1, 2018 at 815.790 feet above mean sea level. The variance during October, and over only six days, was 2.131 feet in monitoring well DGW-2I. This resulted from 4.26 inches or rain over the first seven days of the month.

2 Summary of Validated Data and Results

Pump & Treat System Monthly NPDES Samples

The permit limitations and analytical results are shown in Table 5, below. There were no effluent limitation exceedances.

Table 5
Central Wire Union Illinois Pump & Treat Effluent Analytical Results

Parameter	Effluent Limitation (Daily Maximum), ug/L	Effluent Analytical Results, ug/L
1,1,1-Trichloroethane	20	0.24 J
Tetrachloroethene	20	<0.15
Trichloroethene	20	1.0

J = Estimated value. Analyte detected at a level < the Reporting Limit (RL) and > or = to the Method Detection Limit (MDL). The user of this data should be aware that this data is of limited reliability.

Table 6 tabulates and plots the trends in the effluent limited parameters of TCA, PCE and TCE. The results of the October grab sample were back down to the zone that has trended over 2018 - < 1.5 mg/L, except for June and September.

This NPDES analytical report also has environmental analytical results for CWI's North and South Seepage Ponds. These ponds are Illinois EPA-regulated seepage ponds for CWI's rinse waters from the annealing process, non-contact cooling water, boiler blowdown and for storm water collection.

- 3 Upcoming Events/Activities Planned** – CWI will continue to operate the existing remediation systems. Effluent samples will be collected, analyzed and reported as required in our NPDES permit.

CWI has reapplied for the NPDES permit for this system adding a second discharge for the pump and discharge system and awaits permit issuance by IEPA. The current permit expired on May 31, 2018. IEPA has verbally informed CWI that they could continue to operate their pump and treat system under the expired permit until the new permit is issued. The new permit has been public noticed and there have been requests for a public hearing. IEPA is currently making the determination on holding a public hearing. They would like to avoid a hearing.

Extraction Well No. 2 is being repaired in November.

CWI has met with Ex. 6 Personal Privacy (PP) work out details and schedules and met with them and is currently drafting a contract for use of their property.

Samples will continue to be collected at the Ex. 6 Personal Privacy (PP) wells [well no. **Ex. 6 Personal Privacy (PP)**] every month when the irrigation pumps are operating, usually between May and November of each year.

- 4 Anticipated Problem Areas and Recommended Solutions** – None.

- 5 Key Personnel Changes** – None.

6 Target and Actual Completion Dates – This project has not deviated from the project schedule.